



A service of the [U.S. National Library of Medicine](#)  
and the [National Institutes of Health](#)

[www.pubmed.gov](#)

[\[Sign In\]](#) [\[Registered\]](#)

Art. Categories: PubMed | Medline | Preprints | Research | Statistics | CDD | PDB | Journals | Books

Search PubMed for:

Limits | Preview/Index | History | Clipboard | Details

Display: AbstractPlus | Show: 20 | Sort By: | Send to: |

All: 1 | Review: 0

☐ 1: [1 Infect Dis. 1989 Feb;159\(2\):239-47.](#)[Links](#)

**Interleukin-2 protects neonatal mice from lethal herpes simplex virus infection: a macrophage-mediated, gamma interferon-induced mechanism.**

**Kohl S, Loo LS, Drath DB, Cox P.**

Program in Infectious Diseases, University of Texas, Medical School at Houston 77025.

Administration of human recombinant interleukin-2 (IL-2) protected neonatal mice from a lethal herpes simplex virus (HSV) infection. Protection was not associated with viral antibody production, enhanced natural killer cell cytotoxicity, or intrinsic resistance of macrophages to viral infection. Protection was associated with increased macrophage-mediated antiviral antibody-dependent cellular cytotoxicity (ADCC). Spleen cells from IL-2-treated neonatal mice and from neonatal mice that were treated in vitro with IL-2 transferred protection to neonatal mice. These cells, by adherence, silica, and asialo GM 1 antibody treatment, were shown to be macrophages. IL-2 treatment in vitro enhanced the neonatal macrophages' ADCC function and superoxide release. Similar protection was induced by gamma interferon (IFN-gamma)-treated spleen cells. Antibody to IFN-gamma ablated both IFN-gamma- and IL-2-induced protection by adherent spleen cells. Thus, IL-2-mediated protection against murine neonatal HSV infection was affected by stimulated macrophage activity, via helper T cell-produced IFN-gamma.

PMID: 2492588 [PubMed - indexed for MEDLINE]

#### Related Links

- [Protection against murine neonatal herpes simplex virus infection by lymphoplasma](#) 1997
- [Defective production of anti-herpes simplex virus antibody by neonatal mice](#) 1997
- [Protection of neonatal mice against herpes simplex virus infection, probably mediated by](#) 1997
- [The genetic deficiency of leukocyte surface glycoprotein Mac-1, LFA-1, p150](#) 1995
- [Requirement for natural killer cell-produced interferon gamma in defense against HSV-1](#) 1995

[+ See all Related Articles..](#)

Display: AbstractPlus | Show: 20 | Sort By: | Send to: |

[Write to the Help Desk](#)  
[NCBI | NLM | NIH](#)  
[Department of Health & Human Services](#)  
[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)